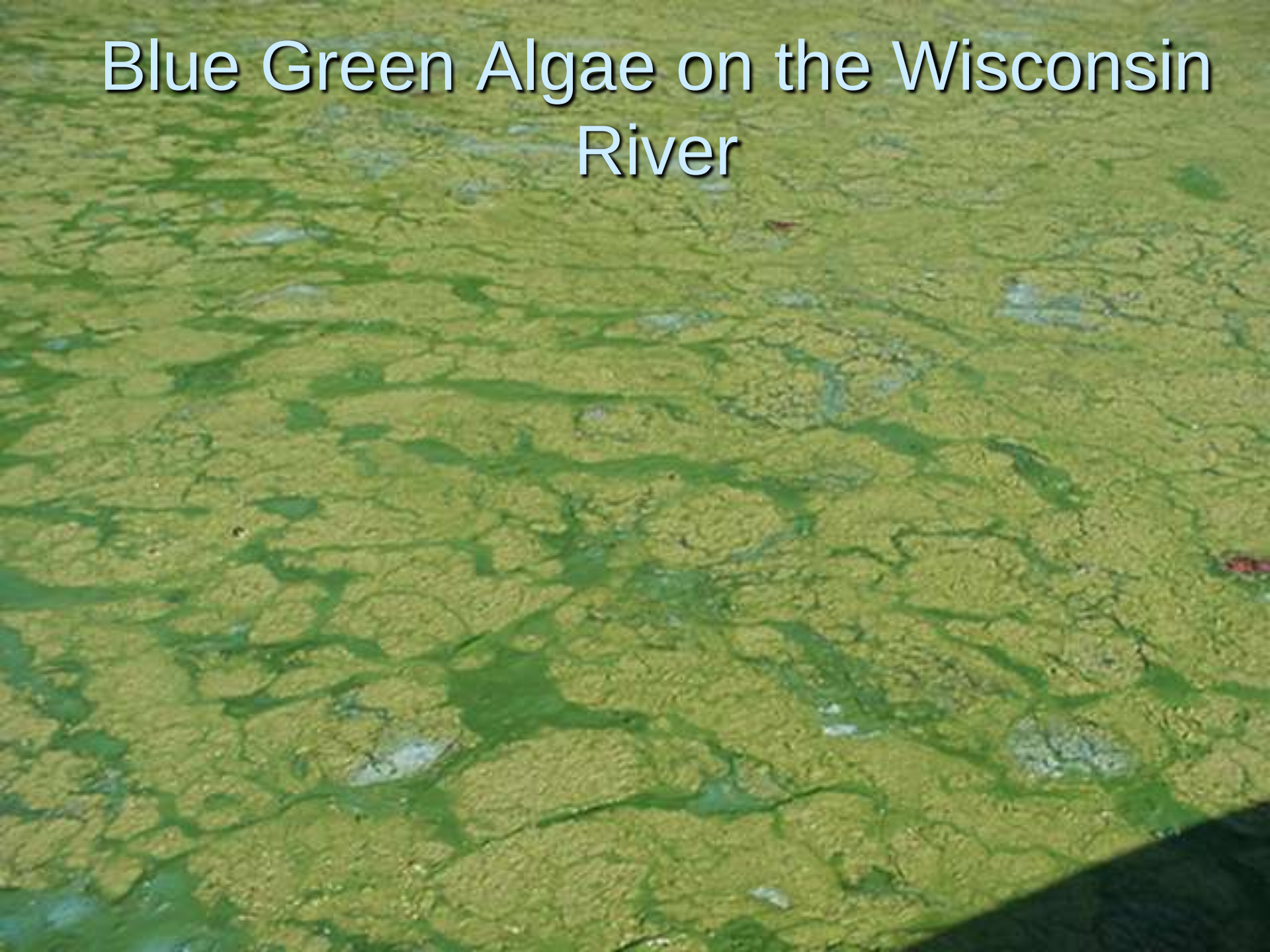
Blue Green Algae on the Wisconsin River



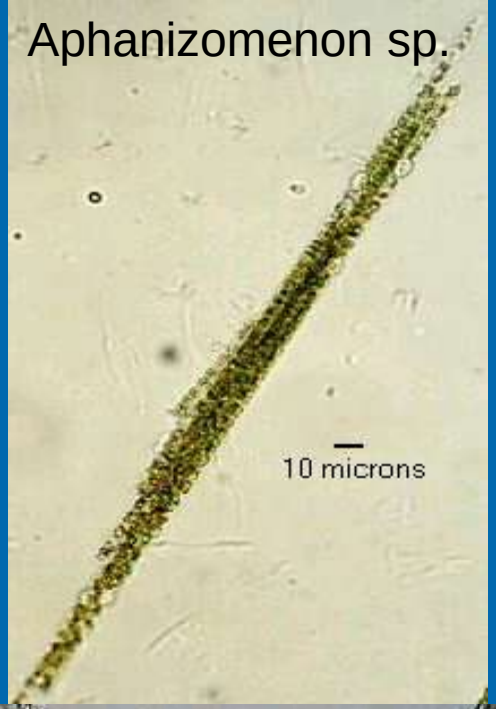
What are blue-green algae?

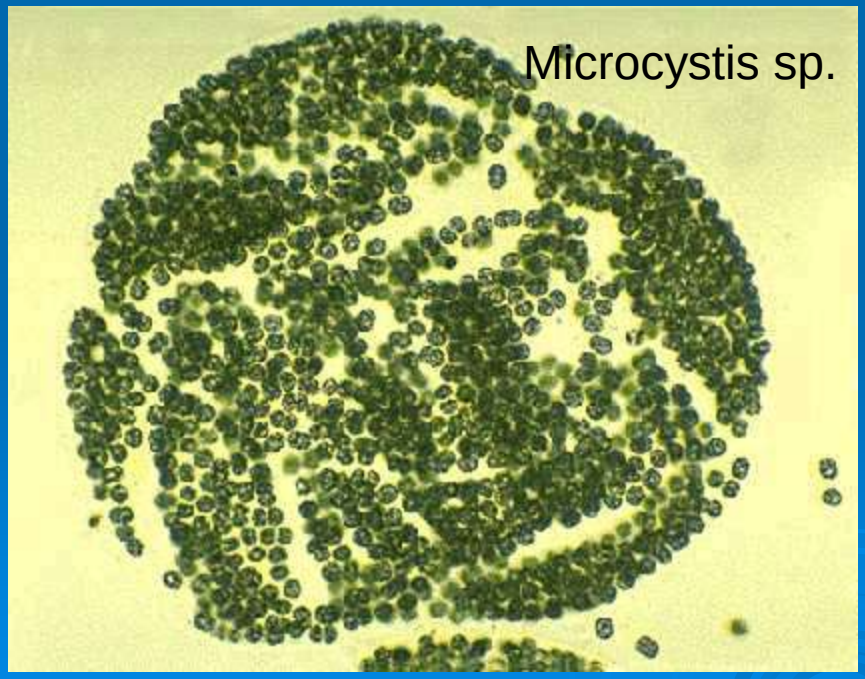
- Cyanobacteria that can photosynthesize
- Need nutrients (P and N)
- Naturally-occurring in lakes and ponds
- Been on the Earth for millions of years
- Can form obnoxious mats and/or scum
- Some can release toxic substances

The common BGA that can be harmful…

The “Big Three”, or AKA, Annie, Fannie and Mike.

But there are others!





Why on the Wisconsin River?

Huge drainage area – 20% of the state!

Natural nutrient rich water

Increased nutrients with settlement

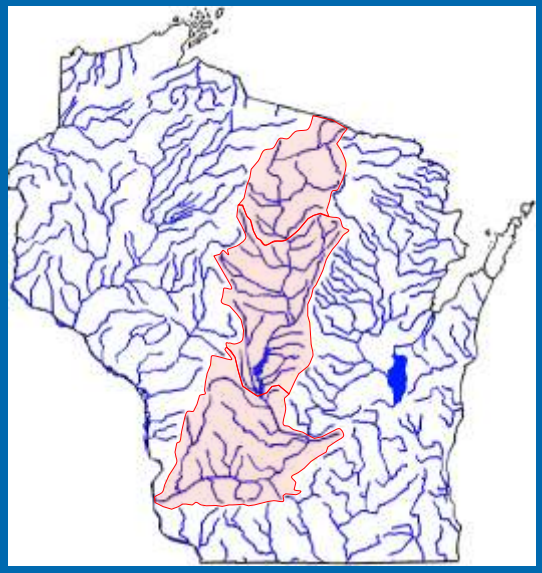
Creation of the reservoir systems

Developed shorelines

More recreational contacts

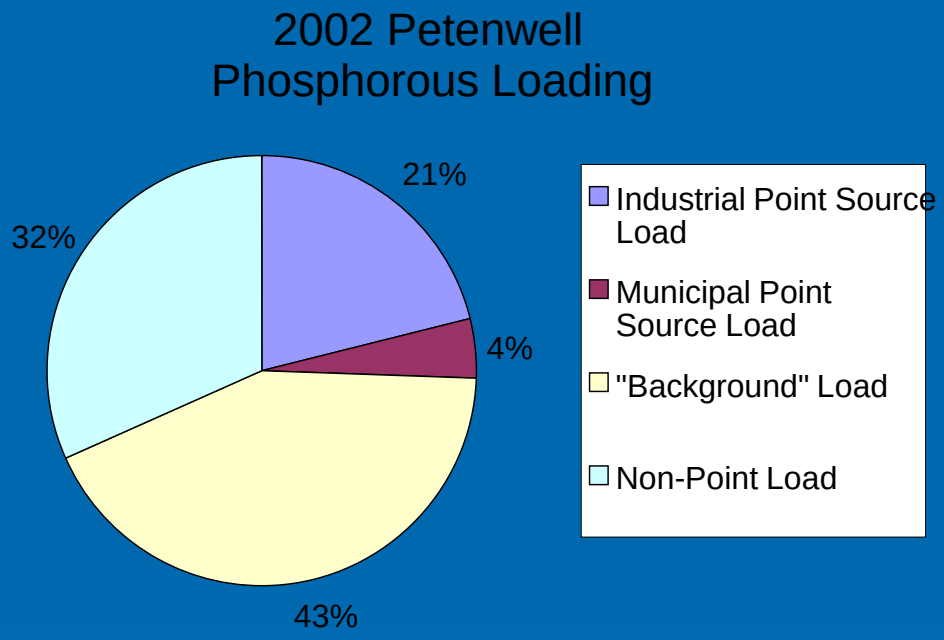
Emerging health implications

Socio-economic impacts



Nutrients are the driving force

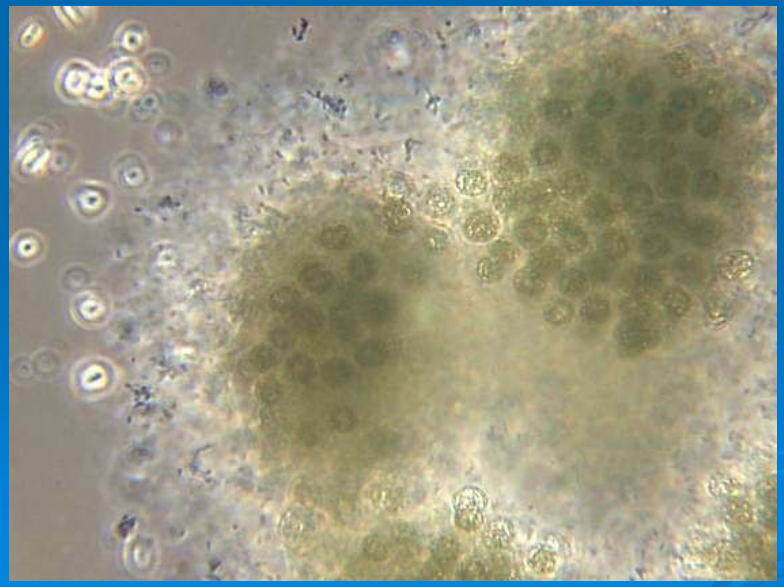
- Huge watershed and nutrient load
- Point sources 25%, NPS 32% the balance is from the watershed and lake
- Just to reduce the number of blooms, P imports would have to be cut by half



When do blooms occur?

Glad you asked!

- Virtually everywhere and opportunistic
- Responds to positively to sunlight, temp, nutrients (P & N), quiescent waters



And…

- Usually mid June through early September
- Usually a lack of plants, but not always

Where does BGA occur?

- Wind can easily concentrate it on downwind shores.
- Can be very dense at shore

(coincidently where kids and dogs usually play)

BGA Blooms can also be massive